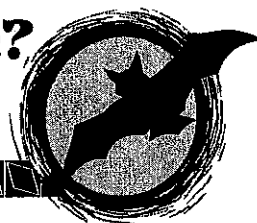


Who Turns Out the Lights on Halloween?

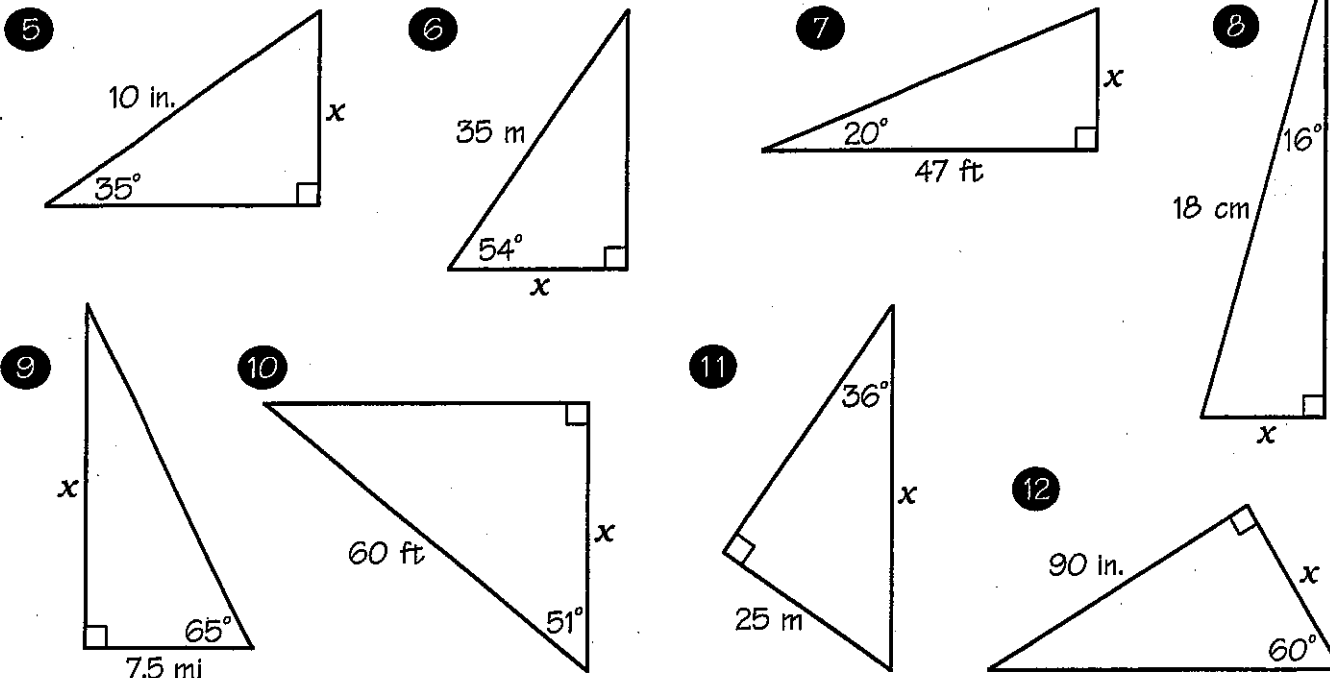


Cross out the letters above each correct answer. When you finish, write the remaining letters in the spaces at the bottom of the page.

In Exercises 1-4, solve the equation. Round your solution to two decimal places.

- 1 $\sin 22^\circ = \frac{x}{15}$ 2 $\tan 75^\circ = \frac{n}{80}$ 3 $\sin 48^\circ = \frac{7}{a}$ 4 $\cos 6^\circ = \frac{92}{k}$

In Exercises 5-12, find the length of the side labeled x . Round to one decimal place.



In Exercises 13-15, find the required length. Round to one decimal place.

13. When a 20-ft ladder is leaned against a wall, it makes a 72° angle with the ground. How high up on the wall does the ladder reach?
14. A ship is sailing toward a small island 700 mi away. If the ship is 2° off course, by how many miles will it miss the island?
15. A cable from the top of a 100-ft telephone tower makes a 50° angle with the ground. How long is the cable?

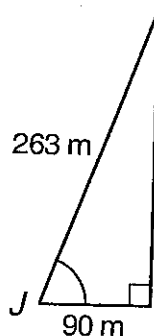
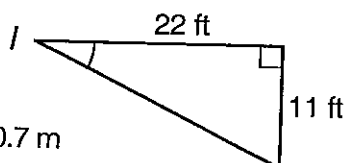
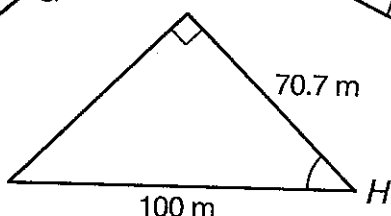
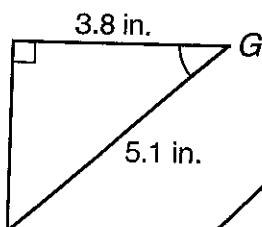
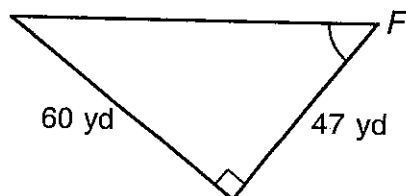
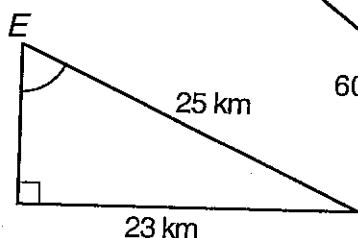
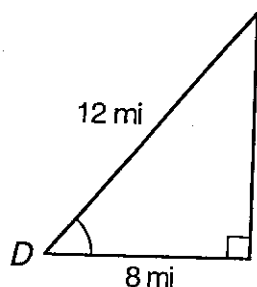
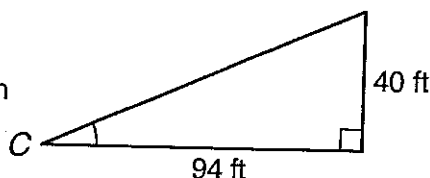
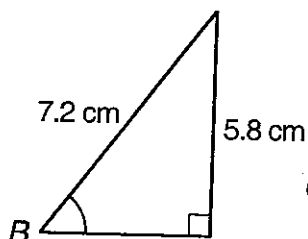
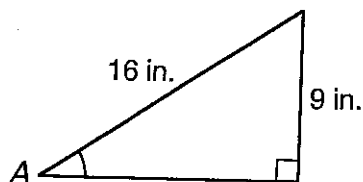
SO	TH	AC	AT	EB	EL	ME	AB	IG	ET	OO
42.5 m	22.5 ft	20.6 m	5.0 cm	130.5 ft	128.1 ft	92.51	19.0 ft	4.7 cm	16.1 mi	298.57
HT	OP	SW	AY	IN	QU	IT	UP	MU	CH	ON
55.4 in.	9.42	20.3 mi	24.4 mi	5.62	37.8 ft	38.1 m	17.1 ft	52.0 in.	95.32	5.7 in.

Did You Hear About . . .

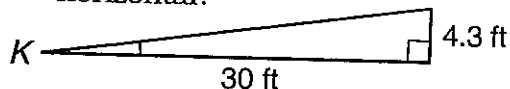
A	B	C	D	E	F	G
H	I	J	K	L	M	N
						?



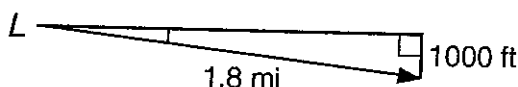
For each exercise, find the measure of the indicated angle (round to the nearest degree.)
Write the word next to the correct answer in the box that contains the vertex letter.



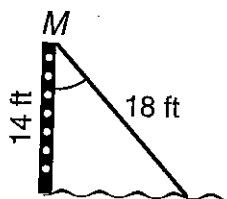
A wheelchair ramp rises 4.3 ft over a distance of 30 ft. What is the angle of the ramp with the horizontal?



A plane descends 1000 ft while flying 1.8 mi. What is the angle of descent? (1 mi = 5280 ft)

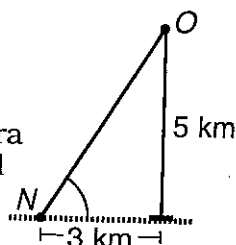


The top of an 18-ft waterslide is 14 ft above the ground. What angle does the slide make with the vertical ladder?



Tracking a Rocket

Launch. At what angle must a camera at point N be aimed to photograph a rocket at point O?



31° • POP

23° • BOTTLE

42° • LESSONS

57° • FIZZ

8° • BECOME

52° • MUSIC

48° • THAT

37° • SONG

27° • ORDER

34° • THE

59° • LITER

10° • WIN

67° • TOOK

50° • ON

39° • BAND

54° • SODA

4° • ONE

45° • IN

6° • A

70° • TO